

# Plastics pipes and fittings — Crosslinked polyethylene (PE-X) pipe systems for the conveyance of gaseous fuels — Metric series — Specifications —

## Part 4: System design and installation guidelines

ICS 23.040.20; 23.040.45; 75.200

# National foreword

This British Standard reproduces verbatim ISO 14531-4:2006 and implements it as the UK national standard.

The UK participation in its preparation was entrusted by Technical Committee PRI/88/2, Plastics piping for pressure applications, to Subcommittee PRI/88/2/6, Thermoplastics piping for gas supply, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

## Cross-references

The British Standards which implement international publications referred to in this document may be found in the *BSI Catalogue* under the section entitled “International Standards Correspondence Index”, or by using the “Search” facility of the *BSI Electronic Catalogue* or of British Standards Online.

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## Summary of pages

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# INTERNATIONAL STANDARD

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**14531-4**

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## **Plastics pipes and fittings — Crosslinked polyethylene (PE-X) pipe systems for the conveyance of gaseous fuels — Metric series — Specifications —**

Part 4:

### **System design and installation guidelines**

*Tubes et raccords en matières plastiques — Systèmes de tubes en polyéthylène réticulé (PE-X) pour le transport de combustibles gazeux — Série métrique — Spécifications —*

*Partie 4: Lignes directrices pour la conception et l'installation du système*



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## Foreword

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Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 14531-4 was prepared by Technical Committee ISO/TC 138, *Plastics pipes, fittings and valves for the transport of fluids*, Subcommittee SC 4, *Plastic pipes and fittings for the supply of gaseous fuels*.

ISO 14531 consists of the following parts, under the general title *Plastics pipes and fittings — Crosslinked polyethylene (PE-X) pipe systems for the conveyance of gaseous fuels — Metric series — Specifications*:

- *Part 1: Pipes*
- *Part 2: Fittings for heat-fusion jointing*
- *Part 3: Fittings for mechanical jointing (including PE-X/metal transitions)*
- *Part 4: System design and installation guidelines*

## Introduction

Further to the publication of International Standards for crosslinked polyethylene (PE-X) hot-water pipes, it has become evident that the properties of PE-X, in particular its high fracture resistance and a recently established socket and saddle fusion-jointing capability, render it suitable for use in high-performance gas-distribution systems. The philosophy of ISO 14531 is to provide the basis for the introduction of PE-X gas pipe systems by the specification of a performance envelope beyond that covered by existing PE standards in order to take its application into regimes of higher operating pressures and extremes of operating temperature.

This part of ISO 14531 is therefore one part of a four-part system standard covering pipes, fittings for heat-fusion jointing, fittings for mechanical jointing and design and installation guidelines. The content is suitable for use by procurement authorities and distribution engineers responsible for the design, installation and operation of pipeline systems.

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